

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1-5. (canceled)

6. (currently amended) A device for target scoring, comprising:

- a. an elongated retro-reflective member having the ability to reflect a ray of light substantially in the direction of its source;
- b. a first light source disposed at a first location spaced apart from the retro-reflective member and positioned so as to be able to direct a first beam of light toward the retro-reflective member;
- c. a second light source disposed at a second location spaced apart from both the retro-reflective member and from the first light source, the second light source positioned so as to be able to direct a second beam of light toward the retro-reflective member so that the second beam of light intersects the first beam of light over an area defining a target area;
- d. a first light sensor, disposed adjacent the first light source and positioned so as to be able to receive light from the first light source that has been reflected from the retro-reflective member, that generates a first signal indicative of a first position of a first blockage of illumination from the retro-reflective member;
- e. a second light sensor, disposed adjacent the second light source and positioned so as to be able to receive light from the second light source that has been reflected from the retro-reflective member, that generates a second signal indicative of a second position of a second blockage of illumination from the retro-reflective member; and

f. a processor responsive the first signal and to the second signal that is programmed to determine a location of the object in the target area, based on the first position of the first blockage of illumination and the second position of the second blockage of illumination,

~~The device of Claim 1,~~ wherein the processor is further programmed to ignore objects passing in the target area at less than a predetermined velocity.

7. (currently amended) A device for target scoring, comprising:

- a. an elongated retro-reflective member having the ability to reflect a ray of light substantially in the direction of its source;
- b. a first light source disposed at a first location spaced apart from the retro-reflective member and positioned so as to be able to direct a first beam of light toward the retro-reflective member;
- c. a second light source disposed at a second location spaced apart from both the retro-reflective member and from the first light source, the second light source positioned so as to be able to direct a second beam of light toward the retro-reflective member so that the second beam of light intersects the first beam of light over an area defining a target area;
- d. a first light sensor, disposed adjacent the first light source and positioned so as to be able to receive light from the first light source that has been reflected from the retro-reflective member, that generates a first signal indicative of a first position of a first blockage of illumination from the retro-reflective member;

- e. a second light sensor, disposed adjacent the second light source and positioned so as to be able to receive light from the second light source that has been reflected from the retro-reflective member, that generates a second signal indicative of a second position of a second blockage of illumination from the retro-reflective member; and
- f. a processor responsive the first signal and to the second signal that is programmed to determine a location of the object in the target area, based on the first position of the first blockage of illumination and the second position of the second blockage of illumination,

~~The device of Claim 1,~~ wherein the processor is further programmed to ignore objects having a cross-sectional diameter greater than a predetermined amount.

8. (currently amended) A device for target scoring, comprising:
- a. an elongated retro-reflective member having the ability to reflect a ray of light substantially in the direction of its source;
 - b. a first light source disposed at a first location spaced apart from the retro-reflective member and positioned so as to be able to direct a first beam of light toward the retro-reflective member;
 - c. a second light source disposed at a second location spaced apart from both the retro-reflective member and from the first light source, the second light source positioned so as to be able to direct a second beam of light toward the retro-reflective member so that the second beam of light intersects the first beam of light over an area defining a target area;

- d. a first light sensor, disposed adjacent the first light source and positioned so as to be able to receive light from the first light source that has been reflected from the retro-reflective member, that generates a first signal indicative of a first position of a first blockage of illumination from the retro-reflective member;
- e. a second light sensor, disposed adjacent the second light source and positioned so as to be able to receive light from the second light source that has been reflected from the retro-reflective member, that generates a second signal indicative of a second position of a second blockage of illumination from the retro-reflective member; and
- f. a processor responsive the first signal and to the second signal that is programmed to determine a location of the object in the target area, based on the first position of the first blockage of illumination and the second position of the second blockage of illumination,

~~The device of Claim 1,~~ wherein the processor is further programmed to ignore objects which are present within the target area for an amount of time that is greater than a first predetermined period or less than a second predetermined period.

9-23. (canceled)